

Exhibit 4

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

In Re Google, Inc., Privacy Policy Litigation.

Case No. 5:12-cv-01382

REPLY DECLARATION OF
FERNANDO TORRES ON THE
MARKET VALUE OF CLASS
MEMBERS' PERSONALLY
IDENTIFIABLE INFORMATION AT
ISSUE

Date: June 12, 2015

I, FERNANDO TORRES, declare and state as follows:

1. I have been retained as an expert by attorneys for Plaintiffs to consult concerning the damages issues presented in the above-captioned case. Specifically, I have been tasked with analyzing the economic damages to Plaintiffs and others similarly situated due to Defendant Google, Inc.’s (“GOOGLE”) breach of the privacy policies and other contracts that governed the privacy rights of Android Users during the Class Period (February 1, 2009 to May 31, 2014).

2. In the course of this engagement, I conducted research relying on publicly available information. After reviewing and analyzing the material available to me and after conducting further research surrounding the relevant issues, I produced a Report dated March 12, 2015. Further to that Report, now that GOOGLE has submitted its opposition to Plaintiffs' motion for class certification, I have been asked to address one specific conclusion set forth in the Report

1 regarding the market value determination of the personally identifiable information at issue in
 2 this case. Again, the facts and data considered in forming my opinions are identified where
 3 referenced in the text and footnotes that follow.

4 3. In my Report, I state that the market value of the personally identifiable information at
 5 issue is measurable via the proxy of the prices paid for consumer email databases for mass
 6 marketing purposes.¹ There is a well-developed market for collections of such sets of
 7 information. Furthermore, the information at issue has the additional characteristics of being
 8 both current and associated with Android smartphone owners in the market for premium
 9 mobile apps. As a consequence, it is rational to expect the market value of this type of highly-
 10 qualified lead information to be worth more than general (un-qualified) lead information.

11 4. Methodologically, the Market Approach to valuation relies on identifying comparable
 12 transactions to establish benchmark values to appraise an asset. Consistent with this approach,
 13 in my Report, I researched pricing from information brokers for marketing lists focusing on the
 14 comparability of the information being sold, and took account of the additional qualitative
 15 attributes of the information at issue. Based on my research into the highly competitive market
 16 for consumers' personal information,² I concluded that the personal information at issue has a
 17 value of \$0.18 per set, explaining that general, unqualified personal data has a minimum value
 18 of \$0.015 per set and that the market value of the more highly-qualified data provided by
 19 GOOGLE to app developers is higher than this minimum figure.³

20 5. In the Report I referenced the pricing quoted for mailing lists of "New Movers and
 21 Homeowners" from a specific national vendor⁴ as the most comparable proxy since, as of the
 22 date of the Report, I found that its price per name was in the middle of the range of all prices
 23 identified for qualified mailing lists; however, the Report listed only the information I
 24

25 ¹ Report, at §16(a).

26 ² The competitive nature of the market also implies that prices tend to converge around industry averages, as
 27 potential buyers can compare prices and drive outliers out of business. Thus, a comprehensive census of offerings
 is not necessary, a simple sampling of a relatively few competitors is sufficient to ascertain industry averages.

³ Report at §17.

⁴ Vistaprint, using information from AccuData. (<http://www.vistaprint.com/mailinglists.aspx> retrieved January 26, 2015). I have since learned that service is no longer being offered.

1 considered at the time to be most relevant to my conclusion, rather than all such information I
 2 found.

3 6. To further clarify the nature of the supporting data regarding that conclusion, I am here
 4 including further pricing data for specifically-targeted marketing lists available from a variety
 5 of sources which provide information to be used for postal mailing, electronic mailing, and
 6 telephone/text messaging marketing campaigns. Exhibit 1, for example, contains the first 30
 7 listings available from several vendors via marketing firm Nextmark when searching for email
 8 lists of “smartphone owners”. Focusing on the listings “Mobile Smartphone Users” and
 9 “Smartphone and Tablet Users,” I was able to determine that the cost of a minimal database of
 10 name and email addresses from these sources was \$190 and \$175 per thousand respectively, to
 11 which an additional fee of \$140 or \$125 per thousand must be added as shown in Exhibits 2
 12 and 3. Thus, the average market price of this information is \$0.315 per set (name and email
 13 address).⁵

14 7. Moreover, after issuing the Report, I located an email list vendor selling the names and
 15 email addresses of “Android Phone Owners/Users” (see Exhibit 4), which prices the
 16 information at issue at \$185 per thousand, or \$0.185 per set, which is within the range of
 17 comparable lists according to my Report.

18 8. Consequently, the proxy data referenced in the Report as support for my conclusion,
 19 while referencing names and postal mailing addresses, remains valid as an indicator of a base
 20 level, or benchmark, market price of name and email information substantially comparable to,
 21 and representative of, the information at issue. If anything, it errs slightly on the side of caution
 22 by not giving greater weight to the most expensive lists, and rounding down to the nearest cent
 23 per set of name and email address.

24
 25
 26 5 This is calculated as the simple average between the total costs of the email lists of \$330 and \$300 per thousand
 27 for “mobile smartphone users” and “smartphone and tablet users” respectively. Note that in each of the Nextmark
 28 documents attached hereto as exhibits, the reference to “/M” indicates that the list offered for sale is priced on a
 per-thousand record basis, such that a price of \$190/M is \$190 for one thousand records, or \$0.19 per individual
 record.

9. Therefore, I reiterate my conclusion that:

The personally identifiable information disclosed by GOOGLE allegedly in breach of its contracts with Plaintiffs and other users is an economic good with a baseline market value estimated at **\$0.18** per set (name, email, and location).

10. Nothing in the foregoing has any impact whatsoever on any other analyses or conclusions reached in my Report, including the other valuations provided therein.

11. I declare under the penalty of perjury and under the laws of the State of California that the forgoing is true and correct and based upon my personal knowledge and/or professional opinions, and that if called upon to testify, I could verify the accuracy of the same. Furthermore, compensation related to this report is not dependent, in any way, upon the conclusions reached during the performance of the analysis.

This document was executed in the city of San Diego, California on June 12, 2015.

By: Fernando Torres, MSc
Chief Economist
IPmetrics LLC

EXHIBITS

- (1) Smartphone Owner Email Lists – Results 1 – 30 of 12,344 (Nextmark.com).
- (2) Mobile Smartphone Users Mailing List – Pricing (Nextmark.com).
- (3) Mobile Smartphone and Tablet Users – Pricing (Nextmark.com).
- (4) Android Phone Owners/Users Mailing List – (Nextmark.com)

Exact Data
(855)976-4415

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TELEPHONE LISTS**

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To Fill Out A Form And Receive
A Free Quote

smartphone owners email lists

Showing 1-30 of 12,344 smartphone owners email lists found.

RANK	TITLE	TYPE	LPI	SIZE	PRICE
1	Mobile Smartphone Users	■■■■■	10,254,586	\$190.00/M	
2	AMERICAN BUSINESS NETWORK - FRANCHISE OWNERS	■■■■■	984,650	\$95.00/M	
3	Farm Trends Berry Crops	■■■■■	80	6,324	\$130.00/M
4	Mobile Smartphone Users	■■■■■	10,254,586	\$190.00/M	
5	Mobile Application Users and Downloaders Email Masterfile	■■■■■	9,478,155	\$150.00/M	
6	Active MEDbase200 Nurse Specialists	■■■■■	6,997,732	\$29.50/M	
7	Active Nurse Navigator (by Type, Setting, Specialty)	■■■■■	38,454	\$59.00/M	
8	Hispanic Business Owners	■■■■■	1,500,000	\$75.00/M	
9	Active NURSE SPECIALISTS (Nurses by Type, Setting, Specialty and Job Function)	■■■■■	6,992,355	\$59.00/M	
10	Import Auto Owners USA - Multi-Sourced Import Car Owner Database	■■■■■	22,403,408	\$140.00/M	
11	Value Wizard - Calling All Cars or Used Car Owners	■■■■■	18,000,000	\$175.00/M	
12	AmeriList US Consumer Database	■■■■■	95	230,000,000	\$65.00/M
13	Airplane Owners , Airline Transport Pilots, Aircraft Owners , Commercial Pilots	■■■■■		318,498	\$300.00/M
14	AmeriList Auto Owner Enhanced Database	■■■■■	80	140,700,428	\$75.00/M
15	Automobile and Car Owners VIN	■■■■■	90	66,273,367	\$120.00/M
16	Credit Card Owners by Region	■■■■■		4,210,730	\$80.00/M
17	Exotic Automobile Owners Database	■■■■■		319,919	\$85.00/M
18	VACATION MARKETING - BOAT TRAILER OWNERS	■■■■■		6,000,000	\$70.00/M
19	Amsterdam Printing Small Business Owners Email Database	■■■■■	79	6,525	\$275.00/M
20	Christian Business Owners And Managers at Home Address	■■■■■		6,734,009	\$150.00/M
21	Christian Home Business Owners	■■■■■		6,436,274	\$150.00/M
22	Farm Owners , Operators, Owner/Operators	■■■■■		179,081	\$175.00/M
23	Grease Monkeys - Automotive Owners	■■■■■		24,584,625	\$175.00/M
24	Home Business Owners And Opportunity Seekers	■■■■■		6,573,682	\$150.00/M
25	Road Warriors - Auto Owners	■■■■■		98,008,948	\$110.00/M
26	Swimming Pool Owners : Direct Mail, Telemarketing, and E-mail Available	■■■■■	66	7,350,452	\$80.00/M
27	The Mobile Market - Smartphone and Tablet Users	■■■■■		51,741,687	\$175.00/M
28	Boat and Yacht Owners	■■■■■	88	1,230,314	\$80.00/M
29	Business Owners at Home	■■■■■	72	4,990,629	\$80.00/M
30	E-Connect - Responsive Pet Owners	■■■■■		10,000,000	\$85.00/M



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**POSTAL, EMAIL AND
TELEPHONE LISTS**

Click Here
To Fill Out A Form And Receive
A Free Quote

Mobile Smartphone Users Mailing List

Click here to fill out a form to receive a FREE quote on this list and 10% off your first order through ConsumerBase! The Mobile Smartphone Users file provides its users with the best, in-depth consumer information for cell phone owners who have upgraded to phones with advanced technology. Our file is continuously updated for mobile smartphone users utilizing 4G, internet, apps, and other technologies. Over 97% deliverable, this list creates the opportunity for businesses to dramatically increase response rates for their campaigns targeting smartphone customers.

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SEGMENTS		COUNTS THROUGH 04/02/2015		MARKET: CONSUMER	
10,254,586	TOTAL UNIVERSE / BASE RATE		\$190.00/M		
10,254,586	POSTAL	+ \$190.00/M			
935,218	EMAIL	+ \$140.00/M			
875,259	PHONE	+ \$125.00/M			

DESCRIPTION

This list's managers feature click response to online advertisement in 38 proprietary responder categories. Use this file for postal/email/telephone rental appends and expect a marked increase in responsiveness, or simply augment existing house files.

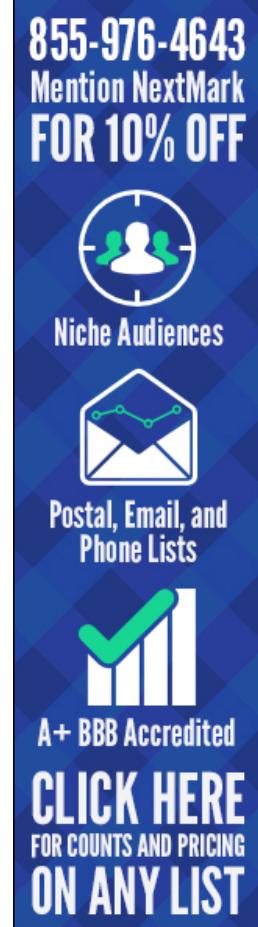
The list managers gather consumer data through response to email advertisements sent out by category. Reach responders who have clicked on a related advertisement in the past 30, 60, 90 or 365 days. Every record has at minimum full name, postal and email addresses, with NCOA performed monthly and all postal data DPV and CASS certified.

ConsumerBase proprietary responder categories include:

Apparel, Auctions, Auto Loans, Bankruptcy, Beauty, Business Opportunity Seekers, Business Opportunity Home Business, Cable and Internet Services, Collectibles and Gifts, Computing, Credit Cards, Dating Services, Debt Consolidation, Education, Electronics, Entertainment, Financial, Fitness, Gambling, Health, Home Business, Home Improvement, Insurance, Investments, Mortgages, Software, Sweepstakes, Tax Services, Telecom, Travel, Weight Loss, and Wireless

ORDERING INSTRUCTIONS

- To order this list, contact your List Broker and ask for NextMark List ID #340155 or [click here to place your request](#).
- 5,000 NAME MINIMUM ORDER \$0.00 MINIMUM PAYMENT
- NET NAME IS NOT ALLOWED
- EXCHANGE IS NOT AVAILABLE
- REUSE IS AVAILABLE



- CANCELLATION FEE AT \$250.00/F

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Exact Data
(877)488-1373

**POSTAL, EMAIL AND
TELEPHONE LISTS**

Click Here
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A Free Quote

The Mobile Market - Smartphone and Tablet Users Mailing List

Click here to fill out a form to receive a FREE quote on this list and 10% off your first order through ConsumerBase! The Mobile Market - Smartphone and Tablet Users mailing list contains in-depth consumer data for tech-savvy consumers owning smartphones, tablet PCs, and other mobile devices. These files are regularly updated through National Change of Address verification every 30 days (3x more often than our competitors) and contain valuable consumer data for individuals always buying the latest tech gadget, regardless of the cost. This mailing list allows marketers to increase the return on their advertising dollars by focusing their campaign on a very specific audience - mobile consumers.

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SEGMENTS		COUNTS THROUGH 05/08/2015		MARKET:	CONSUMER
51,741,687	TOTAL UNIVERSE / BASE RATE		\$175.00/M	CHANNELS:	
51,741,687	POSTAL		+ \$175.00/M	SOURCE:	INTERNET/ON-LINE, COMPILED LISTS
4,718,842	EMAIL		+ \$125.00/M	PRIVACY:	CONFIRMED OPT-IN
3,280,423	PHONE		+ \$110.00/M	DMA?:	NO

DESCRIPTION

This list's managers feature click response to online advertisement in 38 proprietary responder categories. Use this file for postal/email/telephone rental appends and expect a marked increase in responsiveness, or simply augment existing house files.

The list managers gather consumer data through response to email advertisements sent out by category. Reach responders who have clicked on a related advertisement in the past 30, 60, 90 or 365 days. Every record has at minimum full name, postal and email addresses, with NCOA performed monthly and all postal data DPV and CASS certified.

ConsumerBase proprietary responder categories include:

Apparel,

Auctions, Auto Loans, Bankruptcy, Beauty, Business Opportunity Seekers, Business Opportunity Home Business, Cable and Internet Services, Collectibles and Gifts, Computing, Credit Cards, Dating Services, Debt Consolidation, Education, Electronics, Entertainment, Financial, Fitness, Gambling, Health, Home Business, Home Improvement, Insurance, Investments, Mortgages, Software, Sweepstakes, Tax Services, Telecom, Travel, Weight Loss, and Wireless

ORDERING INSTRUCTIONS

- To order this list, contact your List Broker and ask for NextMark List ID #345298 or [click here to place your request](#).
- 5,000 NAME MINIMUM ORDER \$0.00 MINIMUM PAYMENT

877-972-4876
Mention NextMark
FOR 10% OFF


Niche Audiences


Postal, Email, and Phone Lists


A+ BBB Accredited

CLICK HERE
FOR COUNTS AND PRICING
ON ANY LIST

- NET NAME IS NOT ALLOWED
- EXCHANGE IS NOT AVAILABLE
- REUSE IS AVAILABLE
- CANCELLATION FEE AT \$250.00/F

- SMARTPHONE AND POCKET PC MAGAZINE
- PC MAGAZINE SUBS ZIFF DAVIS MEDIA
- FRONTGATE
- MAXIMUM PC
- DIGITALLY CONNECTED TABLET OWNERS
- COMPUTER TABLET OWNERS - POSTAL & EMAIL MAILING LIST
- APPLE PRODUCT OWNERS - POSTAL & EMAIL MAILING LIST
- SOCIAL MEDIA TOUT USERS - POSTAL & EMAIL MAILING LIST
- HAMMACHER SCHLEMMER MAIL ORDER BUYERS

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Android Phone Owners/Users Mailing List

Overview: The Android file consists of smartphone owners that have indicated that they own an Android powered device specifically. Manufacturers consist of HTC, Samsung, LG and others. These are very internet & technology savvy users that use their phones to check email, text message, surf the web, play games and plan their schedules. Most of these users have their entire lives on their phones, and are best reached via email or SMS.

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SEGMENTS	COUNTS THROUGH 04/13/2015
2,761,116 TOTAL UNIVERSE / BASE RATE	\$185.00/M
DESCRIPTION	
The Android file consists of smartphone owners that have indicated that they own an Android powered device specifically. Manufacturers consist of HTC, Samsung, LG and others. These are very internet & technology savvy users that use their phones to check email, text message, surf the web, play games and plan their schedules. Most of these users have their entire lives on their phones, and are best reached via email or SMS.	
ORDERING INSTRUCTIONS	
<ul style="list-style-type: none"> To order this list, contact your List Broker and ask for NextMark List ID #376817 or click here to place your request. 15,000 NAME MINIMUM ORDER \$650.00 MINIMUM PAYMENT PLEASE INQUIRE ABOUT NET NAME PLEASE INQUIRE ABOUT EXCHANGE PLEASE INQUIRE ABOUT REUSE CANCELLATION FEE AT \$500.00/F 	

855-976-4643
Mention NextMark
FOR 10% OFF

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 **Postal, Email, and Phone Lists**

 **A+ BBB Accredited**

CLICK HERE
FOR COUNTS AND PRICING
ON ANY LIST

MARKET: BUSINESS AND CONSUMER

CHANNELS:   

SOURCE: COMPILED LISTS, BUYERS, CASH BUYERS, MULTI-BUYERS, SINGLE BUYERS, LIFESTYLE QUESTIONNAIRE, DIRECTORIES, INTERNET/ON-LINE, DIRECT RESPONSE, OPT-IN E-MAIL, MASTERFILE ENHANCED

PRIVACY: UNKNOWN

DMA?: NO

STATUS: STANDARD PROVIDER

GEO: USA

GENDER: 41% FEMALE 59% MALE

SELECTS

AGE
CHILDREN
EDUCATION
GENDER
INCOME RANGE
MARITAL STATUS
OCCUPATION
SCF
ZIP

ADDRESSING

KEY CODING PLEASE INQUIRE

RELATED LISTS

- [CELL PHONE LEASE & CONTRACT](#)
- [EXPIRES - POSTAL & EMAIL MAILING LIST](#)
- [SMARTPHONE GIZMO - THE](#)
- [NATIONAL SOURCE FOR CELL PHONE CARRIERS](#)
- [AUTO BASE @ ARM: SUV/MINIVAN OWNERS WITH CHILDREN](#)
- [EPSILON TARGETSOURCE U.S. - WIRELESS PHONE](#)
- [EARLY MOMENTS BOOK CLUB MASTERFILE](#)
- [DIGITALLY CONNECTED TABLET OWNERS](#)
- [AMERICAN TECH SAVVY ENTHUSIASTS](#)
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